



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,879	01/29/2004	Shunsuke Matsubara	392.1866	2295
21171	7590	10/05/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			IP, SHIK LUEN PAUL	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/765,879

Applicant(s)

MATSUBARA ET AL.

Examiner

Paul Ip

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/1 &amp; 8/17, 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2837

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Figures 2 or 3 in view of Sherwood (4,228,475).

Prior Art Figures 2 and 3 show the sensor 3 and an inverter unit 1 includes a sensor circuit 2 except the 0V line 6 is not connected to the sensor circuit. However, the patent to Sherwood discloses a ground monitoring system comprising cables (10, 10', 10'') with a ground wire connected to sensor circuits (35, 35', 35''), and motors & transformers within a machine frame/case 59 connected to the ground. Prima facie case is made that when the sensor and the sensor circuit require proper grounding connections, one of ordinary skill in the art would look into the ground monitoring systems and different techniques for proper solutions. Since Sherwood deals with the same problems of the Prior Art Figures 2 and 3, and Sherwood provides the solution to solve the grounding problem of the cables for controlling motors & transformers. It would have been obvious to one of ordinary skill in the art to provide Prior Art Figures 2 and 3 with the grounding connection as taught or suggested by Sherwood.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-281765 in view of JP 2001-286152, or JP 2000-195685, or JP 10-135681.

JP 2002-281765 discloses a grounding method using a shielded cable in which one end of the cable is connected to ground pole. JP 2001-286152 discloses grounding of a grounding terminal in a housing. JP 2000-195685 discloses earth connecting of an earth connecting portion 120c and a base 122. JP 10-135681 discloses connection of

Art Unit: 2837

an outer conductor of a cable and a grounding terminal of a frame. Claims 1-4 are not patentable over these references because these references show different ways of grounding terminals, such as Figures 1-3 of the drawings of this application, to produce the same grounding result. In view of Figures 1-3 of the drawings of this application, one of ordinary skill in the art would realize that the ways of connecting the ground wires of the sensor circuits are functional equivalents/same, which produce the same result. Therefore, it would have been obvious to one of ordinary skill in the art to connect the ground wire of JP 2002-281765 with the way of grounding the wire as taught or suggested by JP 2001-286152 or JP 2000-195685 or JP 10-135681.

Also, see the Notice of Reasons for Rejection for corresponding Japanese Application No. 2003-033618 dated January 19, 2005 for the reason of rejection.

#### ***Response to Amendment***

7. Applicant's arguments filed on 8/17/2005 have been fully considered but they are not persuasive.

Prior Art Figures 2 and 3 show every elements of the invention except the 0V line 6 is not connected to the cable 5. However, one of ordinary skill in the art should notice that Figures 1-3 are electrically equivalents to each other. Applicant should realize that grounding the 0V line 6 at the ground 8 is the same as grounding the 0V line 6 to cable 5 at the grounding 7. Sherwood shows the way of grounding the wire. Applicant should realize that with or without Sherwood, Figures 2 and 3 are electrically equivalents to Figure 1 of the invention. Sherwood is added to emphasize the prima facie case of obviousness of the ground wire equivalents.

Art Unit: 2837

Furthermore, the Notice of Reasons for Rejection for corresponding Japanese Application No. 2003-033618 dated January 19, 2005, is added into the rejection in the format as under 35 U.S.C. 103 according to the U.S. standard.

Applicant should realize that Figures 1-3 of the drawings of this application are electrically equivalents to each other. It shows different ways of grounding the 0V wire for the same grounding result at ground 7 or 8. These figures do not show any patentable distinct connections for the same function. The different ways of grounding the 0V wire do not carry any patentable value for the same grounding function purpose.

***Communication Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941. The examiner can normally be reached on Monday to Friday from 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on (571)-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Paul Ip*

Paul Ip  
Primary Examiner  
10/03/2005